

Toward a Contextualized Cultural Framework

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Abstract This chapter provides a theoretical framework that emphasizes the importance of examining how (1) internal values, attitudes and beliefs, and (2) features of the environment shape psychological processes and behaviors within and across cultures. We define and describe how internal and external sources influence human behavior across societies, both independently and in combination. The framework presented can be used to guide theoretical and empirical work that aims to better understand the relationship between values, attitudes, beliefs and aspects of the external environment on determining human behavior. Additionally, the approach used to develop our framework may not only be useful to social scientists, but to scholars who use techniques such as computational modeling and scenario-based media studies to describe or understand responses of individuals, with varying cultural value, beliefs, and attitudes, who are embedded within particular physical settings and social situations.

Keywords Culture • Cultural dimensions • Affective dimensions • Motivational dimensions • Methodological approaches • Multilevel theory

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1 Introduction

Over the last several decades, cross-cultural researchers have explored how culture impacts a variety of processes that influence individual, team, and organizational outcomes (Aycan, Kanungo, & Sinha, 1999; Erez & Earley, 1987). As military, corporate, and not-for-profit organizations are increasingly operating across a variety of contexts around the globe, the insights from this research are critical for managing differences in culture and for operating in a variety of local, regional, and national contexts. Scholars suggest that nations differ in aspects beyond cultural values and emphasize the importance of understanding all of the relevant sources of influence that could potentially produce differences in psychological processes and behaviors across cultures (Busenitz, Gomez, & Spencer, 2000; Erez & Earley, 1993). In particular, better understanding of the factors that shape cross-cultural behavior across a variety of situational and social context is necessary (Matsumoto & Hee Yoo, 2006; Tsui, Nifadkar, & Ou, 2007).

Motivated by Hofstede's seminal work on culture's consequences (Hofstede, 1980a, 1980b), researchers have tended to rely on values to explain differences across communities around the world (Kirkman, Lowe, & Gibson, 2006). Cultural values consist of one's judgment about what is important in life and tend to guide individual assessments and actions within one's social environment (Hofstede, 1984; McClelland, 1961; Parsons & Shils, 1951; Rokeach, 1973). These values are believed to be shared among a group of people and transmitted from generation to generation through social learning and observation (Bandura, 1986). Studies have shown that values influence cross-cultural differences on rather than in a variety of processes and outcomes, such as cognitive attributes (Morris & Peng, 1994), motivation (Erez, 1997), negotiation styles (Gelfand & Dyer, 2000), and human resource management practices (Aycan et al., 2000).

Although the values approach to understanding culture has made quite a contribution to cross-cultural research, the notion that values are the only predictor of cultural differences is largely contested. Scholars who draw upon systems, subjective, and structuralist perspectives—which tend to focus on external behavioral influences such as norms, social networks, and other aspects of the social structure—advocate that cross-cultural differences in behavior are also influenced by the contextual environment (Gelfand, Nishii, & Raver, 2006; LeVine, 1984; Morris, Podolny, & Ariel, 2000; Triandis, 1972). Theoretically, these perspectives refute the notion that cross-cultural differences can be solely explained by beliefs, attitudes, or perceptions that reside in an individual's head (Earley & Mosakowski, 2000; Gabrenya, 1999; Morris et al., 2000). Empirical findings from a variety of studies further support this view as findings indicate that cultural differences are not always fully explained by values alone (Ip & Bond, 1995; Leung, Bond, & Schwartz, 1995). In sum, although the values approach has contributed to a greater understanding of cross-cultural issues, it is critical that our theoretical and empirical work extend beyond the values approach to include the role of external influences on behavior across cultures.

Table 1 Internal sources of influence

(A) Values
Individualism vs. collectivism
Locus of control
Masculinity/femininity
Temporal orientation
Power distance
(B) Affect
Emotional expressivity
Control
Intensity
(C) Motivation
Self enhancement/self criticism
Uncertainty reduction

This chapter offers a contribution to future studies of cultural influence by developing and presenting a framework based on a contextualized approach to understanding factors that affect psychological processes and behaviors across cultures. From this perspective, the value approach is viewed as limited because internal psychological processes can be and are fostered, primed, and shaped by a variety of aspects in the cultural context. A contextualized approach relies upon a degree of contingency between psychological and behavioral responses and influences of the environmental context, such as the social (religion and family structures), political (government and law), geographic (rural vs. urban, location, terrain characteristics), and communication (language) context. Empirically, support for this approach is evident in research that illustrates differential influences of the same situation on outcomes in different cultures, such as self-esteem and connectedness, suggesting that the external context where interaction takes place matters (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Morling, Kitayama, & Miyamoto, 2002).

The specific contribution of this chapter is that we provide a framework that emphasizes the importance of examining how (1) internal values, attitudes and beliefs, and (2) features of the environment shape psychological processes and behaviors across cultures, both independently and together. We explain what internal and external sources of influence consist of in Tables 1 and 2 and the resulting framework can be used to guide theoretical and empirical work that aims to better understand the relationship between values, attitudes, beliefs and aspects of the external environment in regards to human behavior. Additionally, the approach used to develop our framework may not only be useful to social scientists, but to scholars who use techniques such as computational modeling and scenario-based media studies to describe or understand responses of individuals situated in particular physical settings and social situations.

Table 2 External sources of influence

(A) Social context
Family structure
Religion
Tightness/looseness of social norms
(B) Geography
Rural vs. urban
Climate
Latitude/longitude
(C) Language
Dialect
(D) Political context
Political system
Legal system

2 Theoretical Background

To develop our framework, it is first necessary to better understand how culture has been defined in previous theoretical efforts. As mentioned above, different disciplines have primarily focused on culture either as residing in one’s head in the form of values, attitudes, and beliefs (e.g., Hofstede, 1980a, 1980b, 1983, 1984; Kluckhohn & Strodtbeck, 1961; Parsons & Shils, 1951; Schwartz, 1992) or as a system of meaning manifest in the social environment as practices, rituals, norms, and customs (e.g., Geertz, 1973; Schweder & LeVine, 1984). These values, attitudes, beliefs, and systems of meaning are locally defined and shaped by the social environment in which they are embedded (Geertz, 1973). As a consequence, these differences often distinguish communities around the globe from one another.

These differences are most often salient when culturally diverse members or distinct cultural communities interact with one another (Wenger, 1998). Klein (2004) suggests that these differences across collectives arise from the shared experiences of people within them. Similar experiences with regard to (a) how individuals are raised, (b) available resources, and (c) ecological and social pressures all shape the formation of shared culture. She suggests that people from the same group “... share a ‘lens’ for making sense of the world” (p. 256). The cultural lens model implicitly assumes that the collective will view external cues in a constant way, inhibiting intra-collective variation in cross-cultural behavior. Similarly, sociologists suggest that knowledge about how to interact and relate to others is also guided by shared understanding developed through collective engagement in material practices and symbolic reconstruction (Bruner, 1990; Shore, 1996). As a result, a shared meaning system is thought to emerge among people who belong to the same community or collective.

To understand cultural differences in terms of values, several taxonomies have been created over the past few decades. Cultural value-based taxonomies, such as Hofstede’s Cultural Taxonomy (1980a) and other models of culture (Kluckhohn

& Strodtbeck, 1961; Parsons & Shils, 1951; Schwartz, 1991), have reduced the conceptualization of culture to only a few (e.g., four or five) value dimensions. These culture perspectives, focused largely on values that vary across cultures, provide an integrative system of classification that continues to be applicable to a range of both basic and applied areas of cultural research. For instance, Hofstede's culture taxonomy has provided much guidance for researchers who have sought to identify value differences among nations. As such, these taxonomic systems have provided a basis for many fundamental advances in the social sciences.

Despite the contribution of existing taxonomies of culture, researchers increasingly criticize a reliance on the simplistic values approach (Sivakumar & Nakata, 2001). In addition, scholars have also noted that existing taxonomies of culture do not capture the malleability of culture over time or within-country cultural heterogeneity (Fu, Chiu, Morris, & Young, 2007). More indirectly, other researchers suggest that cultural differences and their influence on behavior may be explained by constructs and mechanisms other than cultural values, attitudes or beliefs (Gelfand, Erez, & Aycan, 2007). To this end, the narrow focus on these values alone as an influence on cross-cultural behavior may also be considered a limitation.

2.1 Moving Beyond the Traditional Value-Based Approach: The Consideration of Context

Although culture can be shared among individuals within the same community, there is growing recognition that culture can also be fragmented and malleable within communities and across contexts as well (DiMaggio, 1997). Scholars have proposed that individuals may have several cultural perspectives or frames from which to interpret and respond to sources of influence in the environmental context. For instance, Chao and Moon (2005) use the term 'cultural mosaic' to describe the multicultural heritage of individuals that is as varied as a mosaic tile. They argue that demographic (i.e., inherited characteristics), geographic (i.e., regional characteristics), and associative affiliations (i.e., formal and informal groups with which one identifies like family, religion, or politics) shape and comprise a person's culture. Chao and Moon use the term 'cultural identity complexity' to describe the multiple cultural identities that people possess, noting that multiple and different aspects of one's identities (or tiles) can be activated at any given time depending on the sources of influence in the environmental context.

Triandis (1972) also suggests that differences in the behaviors of individuals from different cultural backgrounds are due to how subjective, observable features of culture guide behavioral intentions. Empirical studies provide further evidence that particular social and physical situations can trigger and facilitate switching between cultural lenses or frames (LaFromboise, Coleman, & Gerton, 1993). Other researchers demonstrate the conditions under which one's cultural identity can be activated through the use of external stimuli (Hong, Morris,

Chiu, & Benet-Martínez, 2000). Across these numerous studies, it is evident that one's culture, shaped by a plethora of social influences, serves as a lens or frame through which individuals perceive, interpret and respond to external cues in their environment (Hong et al., 2000; LaFromboise, Coleman, & Gerton, 1993).

Although the focus of this chapter is not on the means by which aspects of the environment guide behavior, researchers have begun to make great strides in identifying how sources of influence in the environmental context, such as socially accepted scripts and roles, can constrain and shape differences in behavior across cultures. Some sociologists suggest the cultural resources in the environmental context can be used by actors when deciding how to act, proposing that culture can be defined as a "repertoire" of techniques (Tilly, 1992) and a "toolkit" of strategies (Swidler, 1986). Just as cultural beliefs can affect behavior in the form of rituals and practices, Swidler suggests that variation in the means by which cultures organize, interact, regulate conduct, and engage in ritual practices depends on the use and availability of habits, skills and styles. She argues that when habits, skills and styles are broadly available and social norms of appropriateness permit, people have more freedom to utilize them in a variety of idiosyncratic ways to express their identity, emotions, and goals.

In sum, traditional views of culture tend to categorize culture into a set of internalized beliefs, attitudes and values. However, more recent theory has begun to conceptualize cultural values, attitudes and beliefs as more complex and malleable and has also started to incorporate the idea that culture can also be influenced by the environmental context. Given that examples exist regarding how actions and responses may be constrained or accelerated by the situation, we advocate the importance of exploring other sources of influence that exist in the external environment. In the following section, we address the taxonomic efforts that are somewhat limited in scope by discussing both the intra-individual and external factors that shape psychological processes and behavior across cultures in our framework.

3 A Contextualized Framework of Culture

Our framework is designed to address many limitations of prior taxonomies. Following the criteria of Fleishman and Quantinace (1984) for developing a viable classification system, we have selected variables that theoretically help describe actors across cultures and the environment in which they are embedded. We focus both on how values, attitudes, beliefs as well as the context comprise one's cultural identity. As previous researchers have also done, we expand the values perspective to consider how other psychological functions, such as cognition, affect and motivation can also influence behavior. However, we provide a framework that can support future research that seeks to examine how these processes occur given additional influences from the local, regional, and national context. To account for the influence of various stimuli in the contextual environment that may independently or

conjointly shape behavior, we not only outline internal values, attitudes, and beliefs in the section below, but also provide a means of broadly classifying features of the environmental context.

Through this framework, we aim to advance studies that focus on our understanding of how differences in psychological responses and behaviors across nations and cultures can be explained by considering contextual variables. Our efforts are aimed not only to assist scholars who seek to identify the mechanisms that explain or predict differences in psychological processing and behavior across cultures, but the work of scholars who also seek to simulate and describe human behavior across a variety of settings. For instance, recent research in psychology that relies upon a situated sampling method involves examining cross-cultural differences across distinct populations in the context of a representative set of social situations (Kitayama et al., 1997; Morling et al., 2002). Other research, conducted by computational modelers, aims to simulate and forecast behavior by placing actors or computer agents in a variety of virtual, man-made contexts that mirror real-world contexts. In both of these research domains, our framework provides a means to systematically develop novel hypotheses and thus drive future studies about the interaction of values, attitudes, beliefs and the aspects of the context on subjective responses and objective behaviors.

3.1 Development of a Contextualized Cultural Framework

To develop our framework, we first conducted a thorough multidisciplinary review of current and relevant cultural and social theory across several domains, including psychology, management, sociology, anthropology, and communication. Theories, taxonomies, and frameworks from each of these disciplines were reviewed to determine (1) their approach to explaining culture (e.g., taxonomy, framework, lens, internal states, external cues); (2) relevance to describing actors from different cultures and cultural contexts; (3) their level of analysis (e.g., individual, team, society); (4) validity (e.g., amount of support for this approach); and (5) ability to measure the cultural characteristics described. This information allowed us to determine the relevance of such theories to the framework as well as to begin integrating different aspects of such theories.

We then identified common themes to categorize and classify dimensions of culture, including values, attitudes, beliefs and features of the external local, regional or national context that may also explain cross-national differences. Based on our review, we classified psychological processes that may affect culture into the three categories of cognition, motivation, and affect. Specifically, we believe these three categories guide attention, information processing, and behavior, depending on how the individual or collective derives meaning from the social or environmental cues. In particular, we discuss how existing cultural dimensions, such as those by Sutton, Pierce, Burke, and Salas (2006), Schwartz (1992), and Hofstede (1980a, 1980b), are appropriately classified in one of these supra-categories of cognition, motivation,

and affect. This classification system is also broad enough to include additional dimensions of culture beyond those presented here in this framework. Together, the dimensions included in our framework can be used to differentiate among communities across the globe. The following presents a high level overview of the resulting supra-categories that address the values, affect, and motivations, along with some of the proposed factors that we believe comprise each. Furthermore, we present a classification upon which external context can be considered in conjunction with these supra-categories.

3.2 Internal Sources That Influence Culture

3.2.1 Cultural Values

People are thought to perceive, process, retrieve, and respond to information through the reliance on schemata or mental models. Default assumptions about people, objects, and events and their relationships are stored as cognitive representations. Representations of the self (Markus & Kitayama, 1994), events (Garfinkel, 1987), roles (Fiske & Taylor, 1991), and team process (Cannon-Bowers, Salas, & Converse, 1990; Mohammed & Dumville, 2001) have been empirically tested and proven to guide behavior and social interaction through their influence on expectations and biases about the appropriate ways of acting. Although some representations may be largely universal, others are culturally idiosyncratic, creating variation across groups. Cognitions about the self, interaction with others and beliefs about how to approach social situations include the dimensions of individualism-collectivism, locus of control, power distance, masculinity-femininity, and long-term vs. short term orientation. Each of these are further delineated below.

3.2.2 Individualism-Collectivism

Individualism and collectivism are probably two of the most well-known words in the study of culture. This dimension describes the relationship between the individual and the group in terms of which unit is more important to the individual in question (Sutton et al., 2006). Specifically, these values differ with regards to the relative interdependence or independence felt towards one group (Markus & Kitayama, 2004). For example, individualists tend to be more independent and focus more on themselves than the group. They promote an “I can take care of myself” attitude, are comfortable working alone, and tend to speak out and share their thoughts quite openly. Generally, they tend to distinguish themselves from others based on the unique traits they possess (Markus & Kitayama). On the other hand, collectivists put the needs of the group above their own, and value loyalty and harmony. Furthermore, collectivist individuals tend to define themselves by traits that are also characteristics of the group to which they belong (Markus & Kitayama).

Research also provides further understanding of the constructs of individualism and collectivism. For instance, Triandis and Gelfand (1998) illustrate how both individualism and collectivism may be horizontal, emphasizing equality, or vertical, emphasizing hierarchy. Most published research tends to focus on the former, which has constrained our understanding of how vertical horizontalism and collectivism may affect a variety of important social phenomenon such as leadership, justice, and conflict. To date, researchers have identified how people who are horizontally and vertically collectivist responded to the allocation of rewards differently (Chen, Meindl, & Hunt, 1997) and that vertical oriented cultures place more value on achievement and display of success than horizontally oriented cultures (Nelson & Shavit, 2002). Other researchers have also established individualism and collectivism as mediators of differences between cultures by using measures that are culture specific (Matsumoto et al., 1997).

3.2.3 Locus of Control

This dimension captures the degree to which results are perceived to be due to factors inside (internal locus of control) or outside (external locus of control) an individual (Rotter, 1966). The expectations about whom or what is responsible for events or outcomes are thought to develop from one's cultural, religious, and familial affiliations and past experiences. For example, if individuals or collectives believe fervently in God's will or other external force(s), they are likely to have a stronger external locus of control. In contrast, if collectives believe that their own skill and effort determines outcomes, they are likely to have a strong internal locus of control. Along related lines, fatalism, the belief that whatever happens must happen (Bernstein, 1992) or that one does not have full control over one's actions is also thought to vary across cultures (Aycan et al., 2000). Hence, psychological processes and behavior may be shaped by expectations about outcomes and will differ across local, regional, and national boundaries, depending on the collective's locus of control and fatalism.

3.2.4 Power Distance

Power distance is defined as the extent to which members of institutions and locations expect and accept that power is distributed equally (Hofstede, 1991). In low power distance cultures, there is believed to be minimal emphasis on the obedience of subordinates to their superiors, whereas in high power distance cultures, this is not the case (Hofstede, 1980a, 1980b, 1991). Furthermore, in a lower power distance culture, members may speak up and listen to others, despite differences in status. This, in turn, is likely to promote the willingness of subordinates to approach and question those with higher status and power (Hofstede, 1991, 2001a).

3.2.5 Masculinity–Femininity

According to Hofstede and Hofstede (2005) a society is called masculine “when emotional gender roles are clearly distinct.” In contrast, a society that can be characterized as feminine is one where “emotional gender roles overlap” (Hofstede & Hofstede, p. 120). Masculine values include being assertive, having a high degree of ambition and desire for material things (Hofstede, 1980b). In contrast, femininity is defined as the opposite with values that preference caring, cooperation, and a friendly atmosphere (Hofstede, 2001a). The degree to which masculine values prevail over feminine values, determine the masculinity of a culture. Similarly, femininity is based on the extent to which a culture values feminine values more than masculine values.

3.2.6 Long-Term vs. Short Term Orientation

This dimension describes how different cultures view time (Hofstede & Bond, 1988; Sutton et al., 2006). Long-term orientation is defined by the value placed on future-oriented values such as persistence and saving. In contrast, a short-term orientation refers to values that are focused on respect for tradition and fulfilling social obligations that are oriented towards the past and present. In addition, Hofstede and McCrae (2004) suggest that focus on the short term can also translate into efforts to protect one’s “face” or reputation in Asian cultures. Other research demonstrates that long-term orientation was the best predictor of country differences in norms governing emotional expressivity (Matusmoto et al., 2005) and emotional experience (Matsumoto, Nezelek, & Koopman, 2007). In the following section, we further explore how emotion can vary across cultures.

3.3 *Affective Dimensions*

Scholars believe that emotions enable people to adapt to environmental challenges and opportunities (Arnold, 1960; Frijda, 1987). Moreover, Hochschild (1979) proposed that emotions can and are subject to acts of management. An individual can choose to exert effort to induce or inhibit feelings so that his or her emotional expression is considered appropriate in a particular situation. To determine the appropriateness of emotional expression, culturally prescribed scripts and roles provide the rules for managing feelings (Hochschild, 1979; Rafaeli & Sutton, 1987). Hence, cultural guidelines for the expressivity and control of emotion may vary across individuals and change given the dictates of a particular situation. Furthermore, variation in the interpretation of emotional display may also be explained by distinct cultural frames of understanding due to differences in attribution.

3.3.1 Emotional Expressivity and Control

Although emotion is universal across humans, the expression, control, and perception of emotions by society is influenced by culture. Norms can exist about the valence of emotions and when they are appropriate to be expressed. Culture can also shape beliefs about how one should feel when particular situations occur and how one should act when he or she feels particular emotions (Matsumoto, 1989). The emotional expressivity dimension captures the extent to which an individual is likely to externally display affect, which can be vocal, facial, or gestural (Gross, 1998; Gross & John, 2003). The emotional control dimension captures the way we manage or control emotional impulses (Watson & Greer, 1983). Matsumoto and Ekman (1989) explored the differences in agreement among American and Japanese samples about their perception of universal emotional expressions, finding that Americans gave photos of happy and angry expressions the highest intensity ratings, while Japanese gave photos with disgusted expressions higher intensity ratings. Studies also suggest that there are cultural differences in self-reported emotional experiences, including intensity, duration and control for emotion (Scherer, Matsumoto, Wallbott, & Kudoh, 1988). Given the demonstrated relationship between emotion and culture, we have included emotional expressivity and control to our framework.

3.4 Motivational Dimensions

Differences in external and internal sources of motivation are likely to create variation in responses to environmental stimuli across cultures. Intrinsic motivation is the engagement in actions for their own sake with the only tangible benefit being outcomes such as pleasure, learning, satisfaction, interest, or challenge. Extrinsic motivation is the engagement in activities for the purpose of attaining rewards, such as praise, and to avoid punishment, such as fines (Alderman, 2004; Deci, 1976). Across cultures, differences in self-construal and what people value can predict how individuals are motivated behave. For instance, people with an interdependent self are likely to put a higher priority on the preferences of others compared to people who have an independent self-construal and this difference has been shown to affect how people prefer to make choices. Similarly, motivations to prevent negative consequences have been found to characterize individuals with interdependent selves, whereas the desire to achieve is more common among individuals with more independent self-construal (Heine et al., 1997; Lee, Aaker, & Gardner, 2000). Iyengar and Lepper (1999) also found personal choice to be more intrinsically motivating to people with independent self-construal, while people with an interdependent self-construal preferred to have decisions made for them by trusted peers. These studies shed light on the cross-cultural differences that may predict what individuals are motivated to do, choose, and be.

3.4.1 Self-Enhancement and Self-Criticism

Research suggests that people in the West have a tendency and motivation to maintain and enhance an overall evaluation of themselves or to sustain their self-esteem (Solomon, Greenberg, & Pyszczynski, 1991; Taylor & Brown, 1988; Miller & Tesser, 1989). At the same time, people in other cultures, such as Asian cultures, have been shown to be more sensitive to negative self-relevant information that can indicate whether one has fallen short of meeting the standards of excellence of their social unit, such as one's family or work group (Kitayama & Karasawa, 1997). This is evidence of how goals and motivation can vary based on the values that are characteristic of the culture in which people are embedded (Gelfand & Dyer, 2000). Along the same lines, Heine and Lehman (1997) examined whether there would be differences in the experience of cognitive dissonance after making a difficult choice among Japanese participants, who had a more interdependent self-construal, and Canadians, who tended to have a more independent self-construal. These researchers found that the possibility that one has made a bad choice does not affect individuals with an interdependent self-construal as much as it did people with independent self-construal because this action and consequence was not a threat to their sense of self, which is predominately determined by their interpersonal harmony with others, rather than their own personal achievements. Hence, self-enhancement needs were not found to be universal across these populations.

3.4.2 Uncertainty Reduction

Uncertainty avoidance is one form of uncertainty reduction that can be defined as the extent to which members of a culture feel threatened by ambiguous or unknown situations (Hofstede & Bond, 1984). In uncertainty avoidance cultures, people are likely to shun ambiguous situations (Hofstede & Hofstede, 2005). These cultures are likely to engage in actions, either risky or safe, to reduce feelings of anxiety or discomfort associated with the ambiguity. In contrast, countries or societies with weaker uncertainty avoidance are more comfortable with ambiguous situations; waiting or engaging in activities without rules or guidelines is acceptable. In countries shaped by political and social conflict, such as war, where the population is characterized by a high degree of uncertainty avoidance, anxiety levels may be higher. This results in less tolerance and willingness to wait for resolution. Thus, various factors may influence one's motivations to reduce ambiguity, but his or her level of uncertainty avoidance can influence the decision to initiate, persist, or halt a course of action.

3.5 External Sources That Influence Culture

We expand the use of our framework of cultural dimensions to also include a strategy for classifying and gathering data about the aspects of culture in the environmental context. We propose a set of dimensions that can be used independently and in combination to characterize and classify the external environment. These dimensions encompass the culturally shaped ways that geography, language and physical and social events define the context. The specific environmental dimensions used, and the rationale supporting them are described below.

3.5.1 Social Context

The social context of a country consists of components such as family structure and religion. Cultural meanings about the roles of men and women, husband and wives, children and parents tend to be reproduced and reinforced through customary social interaction (Triandis 1989). Beliefs about how people should behave with others in various situations are guided by the ways that different cultures deem it appropriate to behave as a married couple, as father and son, or as friend to friend. Todd (1985) illustrated differences in family structures across countries. He used various criteria, including whether sons live independently after marriage, means by which inheritance is divided, and the acceptable marriage arrangements between cousins to develop a classification of eight family structures that differ across cultures. These classifications included the following types of family structures: patrilineal, matrilineal, monogamous and polygamous. The influence of the types of family structures across countries has been shown to also affect the way that we interact with superiors at work. For instance, Aycan et al. (1999) identify how paternalistic relationships between subordinate and superiors in the workplace characterize some countries more than others, ultimately predicting cross-cultural variation in work processes and outcomes.

Religions vary in the degree to which they are present and practiced across nations. Hence, religion is one factor that may also influence cross-cultural differences in thinking, feeling and behaving (Georgas & Berry, 1995). The impact of religion on psychological processes and behavior may not only be a result of how often individuals engage in religious practices, such as attending religious services, but in the degree to which religion shapes political procedures and processes (Matsumoto & Hee Yoo, 2006). For instance, in some countries, like the United States, religion and government are kept separate, while others are not. For this reason, religion may have a stronger influence on the culture of a country in some nations as compared to others. Specifically, religious values, such as fatalism or determinism, may influence how people engage with one another and respond to stimuli in their environment across cultures.

In some countries, the liberty to choose from a set of possible actions or responses in a social or situational context may be more limited than in others due to the rigidity of cultural norms (Gelfand et al., 2006). In contrast, other cultures may have more freedom to act in a variety of ways because cultural norms and sanctions are less prohibitive. Scholars suggest the strength of social norms within a society and the severity of sanctioning for breaking norms may predict the extent to which actors are likely to deviate from culturally normative behaviors (Gelfand et al.). Gelfand and colleagues (2011) show that the range of use of culturally-shaped habits, skills, and styles enacted in everyday routines and practices depend on the level of tightness or looseness of the social norms across cultural contexts.

3.5.2 Geography

Chao and Moon (2005) argue that geography can also influence the cultural orientation of individuals. They describe geographic dimension of the environment as aspects of the physical context such as climate, temperature, distance from the ocean, and whether the area is rural or urban. Consistent with previous research demonstrating significant correlations between measures of climate and cultural values (Hofstede, 1980a, 1980b), Chao and Moon posit that geographic and national resources help shape the development and form of civilizations. Recent empirical research has been found to support this idea. For example, Vliert, Huang, and Parker (2004) compared people in locations distinguished by their climate (hotter and colder) in terms of altruism. They found that people who are have more wealth in cold climates tend to be less altruistic than those who are poor; however, the reverse was found in warmer climates. This view is further supported by scholars who demonstrate that the agricultural or industrial context of a community can influence the cultural values of individualism and collectivism (Kluckhohn & Strodtbeck, 1961) and that the organization of political groups emerge differently depending on whether the community is a hunter, gatherer, agrarian or industrial society (Bauböck, 1998). For example, natural resources in the physical environment can influence the types of labor and occupations that characterize the local economic activities. The nature of work, along with labor conditions, can influence the structures of professions and occupational tasks (Triandis, 1972).

3.5.3 Language

The local language can also influence cross-cultural behavior. In particular, Nisbett and Norenzayan (2002) suggest that differences in language can account for differences in cognition, which can, in turn, affect behavior. Findings from their research provide evidence that language can influence the ways that people attend to objects and the relationships they perceive to be occurring between them. Linguists have clustered languages around the world into families based on common sounds, syntax, and lexicon and have identified differences in languages within and across

nations. The linguistic distance between two cultures can be discerned by locating the distance between these cultures on a map of these linguistic families and clusters.

3.5.4 Political Context

The political system of local, regional or national contexts may shape the psychological processing and behaviors of people from different nations. Political scientists have identified various characteristics that differentiate one political regime from another and the factors that may lead to the use of various political systems around the globe (Bueno de Mesquita & Siverson, 1995). Forms of government across cultures are numerous, but political scientists have identified eight broad types of government including, but not limited to full presidential republics, parliamentary republics, absolute monarchies, and single-party states. These political states vary in the extent to which participation of the population in developing policy is encouraged and allowed. Predictors of political structure and political decision-making have been linked to differences in collectivist versus individualist orientation and to orientations regarding power (Schmitter, 1984). Research also demonstrates how the procedures used within one's national government can also shape every day decision making. Specifically, Earley (1999) provides initial qualitative evidence of how American teams opt to use more democratic techniques, such as polling, whereas other countries leverage more authoritarian techniques, such as discussing the views of the leader to reach collective consensus.

3.6 *Types of Cross-National, Cross-Cultural Studies*

In their various review of the cross-national and cross-cultural organizational behavior research, scholars have categorized studies into two types (Kirkman et al., 2006; Lytle, Brett, Barsness, Tinsley, & Janssens, 1995; Tsui et al., 2007). These authors identify what they call 'Type 1' and 'Type 2' studies of culture. Type 1 studies are characterized by work that considers the role of culture as the independent variable, whereas Type 2 studies tend to consider culture as a moderating variable. In type 1 models, culture is largely conceptualized as internalized values, attitudes, or beliefs. Type two models were also more likely to use cultural values or nation as a proxy for culture. A few of the type II studies in the literature do measure perceptions of contextual differences such as perception of organizational political (Fu et al., 2004) or variables such as national wealth and social security (Huang & Van de Vliert, 2003).

We encourage more type II studies that consider the context variables that distinguishes local, regional and national cultures from one another, as moderators between cultural values, attitudes, and beliefs and outcomes, such as behavior (see Fig. 1). The consideration of contextual variables as moderators may help to

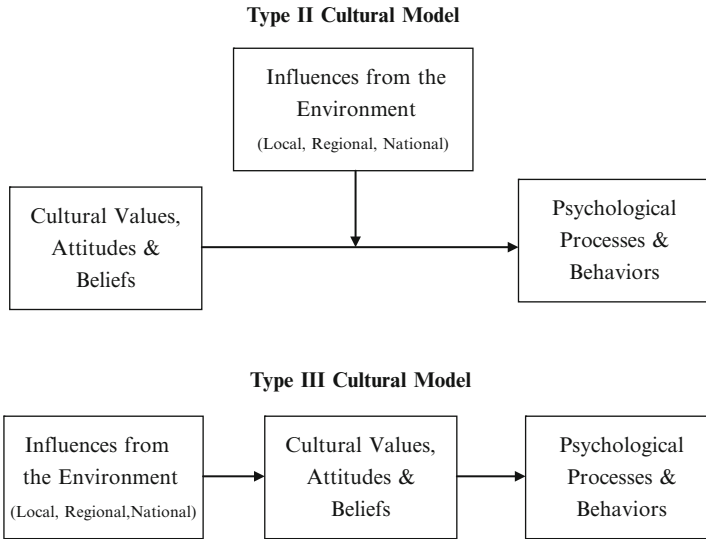


Fig. 1 Type II and III cultural models

gain a richer understanding of when cultural differences will affect psychological processing and behaviors across nations and collectives. We also propose a new type of cross-national, cross-cultural study that explores cultural values, attitudes, and beliefs as mediating variables that explain differences between collectives of individuals embedded in environmental contexts that differ with regard to their political, social, geographic or language characteristics. We illustrate this model in Fig. 1 and suggest that studies that use this type of study may help to further understand how contextual factors shape the cultural values, attitudes, and beliefs that distinguish communities across the globe.

4 Measurement Issues

Although Kitayama (2002) presents possible limitations of the dimension approach, we suggest that particular characteristics of our approach make it amenable to the construction of sociocultural simulation models that can describe and predict human, social, and cultural behavior interactions. Particularly, the breadth of existing literature using the dimension approach makes valid and reliable metrics readily available for the measurement of culture along particular dimensions of culture at various levels of analysis (e.g., individual, team, organization, or nation). Describing culture as dimensional affords this capacity as it reduces the overwhelming complexity of culture to a traceable number of factors (Hambrick, Davison, Snell, & Snow, 1998). Moreover, by focusing on cognition, affect, and

motivation of individuals and collectives and how they influence processing of external information and shape psychological processes and behavior, we hope to further enable the study of culture.

Many of the metrics associated with measuring the value dimensions included in the framework are generalizable and applicable to different levels of analysis. Hence, a criterion for the inclusion of particular values, attitudes and beliefs in our framework was whether we could measure the cultural characteristic in populations using a scale that is proven to be valid, reliable, and generalizable. Measurement of the aggregated cultural values of individuals within teams, organizations, or nations provides information about where the social unit falls along a cultural continuum on a scale. Consideration of the different contextual factors that may shape psychological processes and behaviors across nations and cultures enables empirical testing that can help us to better understand how these contextual variables shape outcomes across settings. Moreover, measurement of values, attitudes, and beliefs using a Likert scale also provides opportunities for these continuous measures to be used by computational modelers who can leverage such metrics for their computer-based games, simulations and virtual media cultural competence training studies. This will allow for development of training platforms that incorporate effective computer-based training design with sound, scientifically-driven content.

Empirical research that incorporates context, levels of analysis, and internal values into their hypotheses and design requires careful planning and consideration. At different levels of analysis, the contextual influences may have a different influence and it is important to capture this interaction. In particular, Chao (2000) advocates the idea that the conceptualization of culture at different levels can provide insight regarding cultural constructs in terms of whether such constructs are truly universal in nature or are confined to a particular collective that is exposed to certain environmental contexts or internal mental structures. For example, it may be the case that at the individual level, power distance matters more to members of a particular region due to the environmental factors impacting that region, whereas members in a different region may be more influenced by individualism. However, when aggregating individual perspectives up across these regions (such as through using an average) to obtain information regarding the national culture, such nuances may not be apparent. Therefore, it is important to understand these issues of levels of analysis, particularly in terms of different types of aggregation outside of sums or averages that may be better equipped to provide accurate representations of cultural information.

We also encourage researchers to consider appropriate techniques for characterizing the culture of social groups, such as teams and nations. Typically, culture variables are represented as compositional in nature, as they are most often represented at higher levels through the use of sums or averages (e.g., Hofstede, 2001a). However, this does not necessarily mean that composition best represents cultural variables. Indeed, it may very well be that cultural variables could be more accurately represented through compilation as the predictive power of team composition, for example, may lie in differences, rather than similarities. These compilation type variables can be captured through the use of standard deviations or

variances, minimum/maximum scores, or patterns (see Kozlowski & Klein, 2000), and may allow for factors such as diversity in cultural beliefs or behaviors to be more appropriately represented. When conceptualizing culture as a multilevel issue, it is important to not only assess the most suitable level of analysis for the cultural issue of interest, but also to consider the way in which to represent culture as an emergent construct so that the most accurate representation is selected.

To measure features of the external context included in this framework, we encourage researchers to measure perceptions of features of the environmental context or to gather data that directly measures some feature of the context, such as the location or type of political regime. Ethnographic and observational methodologies from anthropology and sociology would also be most appropriate. Through field research, qualitative data can be captured that explains how patterns of interaction and the meaning attributed to routines, roles, phrases, and objects vary across cultures. Drawing from methodologies of political scientists, anthropologists, theologians, and geophysicists may also provide new techniques for characterizing the environmental contexts that distinguish communities around the globe. The consideration of the influences external to individuals on how people process information and behavior will provide experimental and computational researchers with various contextual factors in which to study differences in behavior that can complement the work of psychologists that has tended to focus on intra-person cultural values.

5 Discussion

Overall, this framework is designed to (1) provide key definitions and terminology that facilitates shared understanding of cultural dimensions; (2) describe the relationship between these dimensions and contextual features across multiple levels of analysis; and (3) facilitate the generation of hypotheses for future studies. By incorporating values, attitudes, beliefs and aspects of the external environment into our framework, we are able to conceptualize culture in a contextualized manner. In doing so, we bridge a gap between existing cultural perspectives that rely largely of the cultural values perspectives and recent advances in cultural research that argues that context matters and should be taken into account as well (Gelfand et al., 2006; LeVine, 1984; Morris et al., 2000; Triandis, 1972). Characteristics of our framework, including our variable selection criteria and the ease of measurement of values, attitudes, and beliefs also make the framework applicable to multiple levels of analysis. Finally, our framework of culture motivates the importance of considering how features of the contextual environment may suppress, activate or reverse cultural behaviors across local, national, regional communities. We provide a means to begin to systematically understand the relationship that the sources of influence in the environmental context has on cross-cultural behavior. Advanced in any of these areas can help inform computational modeling of cultural differences, aiding in training and development of cultural competence.

Certainly, the complexity of culture can be difficult to capture in a single framework. Given the multiple ways that behavior is influenced across cultures, our framework of culture takes a first step at helping to guide future studies of culture by bridging disparate views on how cross-cultural behavior is shaped. By considering the mutual influence of values, attitudes, motivation and the external context on cross-cultural behavior, we extend the work of existing cultural taxonomies and frameworks. More specifically, we contribute to the field of cross-cultural research by accounting for the cognitive, motivational, and affective dimensions of culture that shape how one perceives, processes, and responds to information, while also taking into consideration features of the environmental context that might shape the activation of these psychological processes and behavioral outcomes.

From a theoretical perspective, this taxonomic categorization of values, attitudes, beliefs and the sources of influence in the external context provides a rich set of variables that researchers can consider when generating hypotheses about behavior across cultures. A theoretical contribution must contain the essential components of *who*, *what*, *when*, *where*, and *how* (Whetten, 1989). Cross-cultural researchers have empirically and theoretically provided evidence that demonstrates how values, attitudes, and beliefs distinguish people from different local, national, and regional contexts and how these psychological states shape behavior. Future studies that consider how values, attitudes and beliefs may interact within and across individuals and communities to influence behavior could be developed from the use of the framework presented in this chapter. In addition, studies that examine the conditions under which these values shape behavior will further advance our understanding of cross-cultural differences in behavior. Since meaning is often believed to be derived from context (Gergen, 1982), attempting to understand why people behave in a particular fashion across families, teams, or countries, requires the systematic investigation of the relationship between values, attitudes, beliefs and behavior within culturally-relevant contexts. Hence, research focusing on the role that features of the external environment play in the relationship between culturally driven psychological states and behaviors has the potential to greatly advance our understanding of cross-cultural differences by providing insight about external triggers that shape behavior.

From a practical perspective, there are benefits to taking a more holistic approach to understanding culture. First, the present framework provides a systematic methodology towards inclusion of context, an area lacking in much existing cultural competency training today. By providing a guiding framework that addresses the critical variables influenced by culture, our framework can be utilized by trainers when developing scenario-based educational tools that incorporate cultural data into the design of scenarios, agent behaviors, and the virtual environment. Developers can systematically assess and design environmental characteristics, such as the social context, physical geography, and demography of the region of interest that may improve the quality of training scenarios. Doing so, may avoid the tendency to develop a culturally rich environment that does not advance training due to the limited understanding of the relationship between the environmental context, values, attitudes, and beliefs and their mutual impact on behavior. Finally, the

inclusion of variables that can be measured quantitatively may also be useful to programmers and trainers who can incorporate this data into their code when developing training and assessment tools. In sum, we believe that this framework will enable computer programmers and trainers to better conceptualize how the features of the environmental context may impact values, attitudes and beliefs (and vice versa).

6 Conclusion

We encourage the use of this cultural framework when studying psychological processes and behavior that vary across cultures because it takes into consideration both sources of influence in the external environment and cultural values, attitudes and beliefs. We hope the perspective that we have presented in this chapter stimulates continued conversation about the influence of the environmental context on psychological processes and behavior, in addition to and in combination with the influence values, affect and motivation that tend to vary across cultures. Research that adopts a contextualized approach will expand our current views of culture by identifying the conditions under which values, attitudes, and beliefs and the contextual environment shape behavior differently across cultures. Additionally, we are confident that our framework will facilitate continued dialog between social scientists and computational modelers who seek to develop sound, theoretically driven and systematic methods to quantify culture in efforts to train cultural competency and forecast cultural differences across populations.

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